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NASA Procedural Requirements

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Appendix A. Definitions

A.1 Agency. The National Aeronautics and Space Administration (NASA).

A.2 Applicable Documents. Citations consisting of documents cited in the body of the document that contain provisions or other pertinent requirements directly related to and necessary for the performance of the activities specified by the document. (Source: NPR 1400.1, NASA Directives Procedural Requirements.)

A.3 Cancellation. A process of rendering a standard inactive.

A.4 Consensus. General agreement, but not necessarily unanimity, and includes a process for attempting to resolve objections by interested parties, as long as all comments have been fairly considered, each objector is advised of the disposition of his or her objection(s) and the reasons why, and the consensus body members are given an opportunity to change their votes after reviewing the comments. (Source: OMB Circular No. A-119, Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities.)

A.5 Handbook (HDBK). A handbook is a guidance document that provides engineering information; lessons learned; possible options to address technical issues; classification of similar items, materials, or processes; interpretative direction and techniques; and any other type of guidance information that may help the Government or its contractors in the design, construction, selection, management, support, or operation of systems, products, processes, or services. (Source: MIL-STD-967, Defense Handbooks, Format and Content.) Also, a how-to document containing procedural, technical, engineering, or design information or data about materials, processes, practices, or methods.

A.6 Impractical. Includes circumstances when the use of voluntary consensus standards

would fail to serve the Agency's program needs; would be infeasible; or would be inadequate, ineffectual, or inconsistent with the Agency's mission. (Source: OMB Circular No. A-119, Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities.)

A.7 NASA-Endorsed Technical Standards Products. Proven technical standards products that have been identified and recommended by NASA Headquarters offices for particular types of applications and should be considered for use as a first order in developing technical requirements for current and future NASA programs and projects.

A.8 NASA Technical Standards Products. NASA documents that contain common and repeated use of rules, conditions, guidelines, or characteristics for products or related processes and production methods and related management systems practices. NASA technical standards products may contain the definition of terms; classification of components; delineation of procedures; specification of dimensions, materials, performance, designs, or operations; measurement of quality and quantity in describing materials, processes, products, systems, services, or practices; test methods and sampling procedures; or descriptions of fit and measurements of size or strength. The term "NASA technical standards products" refers to technical standards, specifications, and handbooks developed and approved by NASA Headquarters offices, assigned a prefix of "NASA-STD-," "NASA-SPEC-," or "NASA-HDBK-," respectively, to the unique document number.

A.9 Other Government Standards. Technical standards product documentation originated and published by Government agencies other than NASA (e.g., military (MIL), Federal (FED), Department of Defense (DoD)).

A.10 Performance Standard. A standard that states requirements in terms of required results with criteria for verifying compliance but without stating the methods for achieving required results; may define the functional requirements for the item, operational requirements, and/or interface and interchangeability characteristics; also may be viewed in juxtaposition to a prescriptive standard. (Source: OMB Circular No. A-119, Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities.)

A.11 Prescriptive Standard. A standard which may specify design requirements such as materials to be used, how a requirement is to be achieved, or how an item is to be fabricated or constructed. (Source: OMB Circular No. A-119, Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities.)

A.12 Reference Documents. Citations in documents that may consist of external requirements that are stated but not cited in the text or the document or may be documents that are considered to be useful as background information for the user to help in understanding the subject matter but do not constitute requirements of the document. (Source: NPR 1400.1, NASA Directives Procedural Requirements.)

A.13 Specification (SPEC). A document that prescribes, in a complete, precise, verifiable manner, the requirements, design, behavior, or characteristics of a system or system component. (Source: NPR 7123.1, NASA Systems Engineering Processes and Requirements.)

A.14 Standard (STD). Common and repeated use of rules, conditions, guidelines, or characteristics for products or related processes and production methods and related

management systems practices; the definition of terms, classification of components; delineation of procedures; specification of dimensions, materials, performance, designs, or operations; measurement of quality and quantity in describing materials, processes, products, systems, services, or practices; test methods and sampling procedures; or descriptions of fit and measurements of size and strength. (Source: OMB Circular No. A-119, Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities.)

A.15 Tailoring. The documentation and approval of the adaptation of the process and approach to complying with requirements underlying the specific program or projects. Tailoring considerations include system size and complexity, level of system definition detail, scenarios and missions, constraints and requirements, technology base, major risk factors, and organizational best practices and strengths. Critical project considerations (e.g., public safety, security, litigation exposures) may preclude tailoring out required process activities, regardless of cost, manpower available, or other considerations. (Source: NPR 7123.1, NASA Systems Engineering Processes and Requirements.)

A.16 Technical Requirements. Requirements that discuss the design, performance, operational parameters, and constraints of equipment and systems. These are requirements that would typically be contained within a system or equipment specification. Requirements are identified by the word “shall.” (Source: NPR 1400.1, NASA Directives Procedural Requirements.)

A.17 Technical Standard. NASA, voluntary consensus, and other Government documents that contain common and repeated use of rules, conditions, guidelines, or characteristics for products or related processes and production methods and related management systems practices. (Source: NPR 7120.5, NASA Space Flight Program and Project Management Requirements.)

A.18 Use. Incorporation of a standard in whole, in part, or by reference for procurement purposes, and the inclusion of a standard in whole, in part, or by reference in regulation(s). (Source: OMB Circular No. A-119, Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities.)

A.19 Voluntary Consensus Standards. Standards developed or adopted by voluntary consensus standards bodies, both domestic and international, that include provisions requiring that owners of relevant intellectual property have agreed to make that intellectual property available on a non-discriminatory, royalty-free, or reasonable royalty basis to all interested parties. (Source: OMB Circular No. A-119, Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities.)

A.20 Voluntary Consensus Standards Bodies. Domestic or international organizations that plan, develop, establish, or coordinate voluntary consensus standards using agreed-upon procedures and are defined by the following attributes: (1) openness, (2) balance of interest, (3) due process, (4) an appeals process, and (5) consensus. (Source: OMB Circular No. A-119, Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities.)

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